P

Name _____

Practice: For use after Lesson 2.4, Algebra 2 with Trigonometry

Algebra 2
Unit #7
WS #6

Solving Compound Sentences with Inequalities

Solve. Graph the solution set.

1. $3x > 3$ and $5x < 20$ _____
2. $4x > -16$ and $7x < 28$ _____
3. $5 < 3x - 1 < 11$ _____
4. $9x < -54$ and $6x > 36$ _____
5. $3x + 1 < 7$ or $7x - 2 > 26$ _____
6. $5 + 7x > 4x + 11$ and $4(2 - x) + 9 < 21$ _____
7. $9 - 5x \geq 29$ or $8 - 4x < 16$ _____
8. $10 - 3x + 7x > 13$ and $6x < 24$ _____
9. $4(2x - 7) + 3 \leq 7$ or $3 + x > -4$ _____
10. $2x - 5 + 7x > 7x - 21$ and $12x - 6 < 30$ _____
11. $1.0 - 0.6x > 0.4x - 4.0$ and $4(x - 1) - 8 \leq 24$ _____
12. $\frac{x}{3} - 2 > 1$ or $\frac{x}{4} + 3 < -1$ _____

Applications

13. **Consumerism** Carlos knew that he had less than 2 gal of juice and that there were more than 32 people coming to his party. Did he have enough so that each person could have an 8-oz drink? _____

MIXED PRACTICE

Graph the solution set of each.

14. $5x - 4 > 11$
15. $x > 2$ and $x < 4$
16. $3x + 4 \leq 19$ and $x + 5 > 8$
17. $8x - 17 \leq 3(2x + 1)$